Daily GLOWBUGS

Digest: V1 #54

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE]

%%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

Subject: glowbugs V1 #54
glowbugs Monday, June 9 1997 Volume 01 : Number 054

Date: Sun, 8 Jun 1997 07:59:00 GMT
From: ralph.hartwell@emachine.com (Ralph Hartwell)
Subject: Re: Electrolytic caps. ne

B>> As I recall, many flash caps do not have good ESR values, and may
B>> possibly overheat or explode when used in filter circuits due to the

B>E.S.R.? You gonna have to help us uninitiated ones here Ralph!

Effective Series Resistance, which may be represented by a resistor in series with a perfect capacitor.

The the filter cap were perfect, it would have close to a zero impedance for AC signals, hence filtering them effectively. A capacitor with a high ESR, has, for all practical purposes, a resistor inside the case along with the capacitor. You can't bypass this resistance, since it is internal to the capacitor. Note that the value of the ESR will change with frequency. All capacitors have some value of ESR, and the ESR generally increases with increasing frequency. That's why an electrolytic cap is not very effective at bypassing RF signals.

In filter service, using a cap with a high ESR will be the same as inserting an external resistor in series with a good quality electrolytic capacitor - excessive hum. Since the ESR is internal to the capacitor, the AC ripple component flowing through it will represent a real power loss (read - heat) and the heat may eventually cause the capacitor to fail catastrophically.

Ralph

- ---
þ QMPro 1.52 þ (A)bort, (R)etry, (I)gnore? An optimist picks (R)etry.

Date: Sun, 8 Jun 1997 12:42:02 +0000
From: "Brian Carling, Radio AF4K" <bry@mnsinc.com>
Subject: Re: Propose BA QSO's on 20 meters

Jack - 14050 seems like a VERY reasonable BA frequency.

Even doubling from 7025 rocks would work for the rock-bound among us.

I hope to hear some of you guys on there! 73 - AF4K

On 5 Jun 97 at 5:45, Jack Meadows spoke about Propose BA QSO's on 20 meters and said:

> On Wed, 4 Jun 1997, Richard Wilkerson wrote:
>
> > Jack I have seen you from time to time on this list.. Thanks for
> > the QSO Tonight.. I tried to say that I had seen you on this list
> > but the QRN/ QSB took me out.. Nice chat...thanks..Did not hear
> > anyone else though, all I could hear was you..... --
> > 72's..... rich Rich Wilkerson, WD6FDD, Santee, Ca.
> > NorCal, ARCI, ScQRPions, E.C.R.A.
> >
> Hi Rich,
> Nice to meet you on last night on 7050 khz. W7EKB, Ken was in there
> but qrn kept us from making it a threesome.
>
> Seems like 20 meters would be a better place for BA's to meet in the
> summer. Less noise and more coverage. Would 14.050 work? Hope to
> cuagn. Now, back to work fixin up that ole Knight T-150 transmitter.
> Ha!
>
> Jack W7QQQ
> Mesa, Arizona
>
>
****
*** 73 from Radio AF4K/G3XLQ Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the interesting ham radio resources at: *
** http://www.mnsinc.com/bry/ *
****

Date: Sun, 8 Jun 1997 12:43:45 +0000
From: "Brian Carling, Radio AF4K" <bry@mnsinc.com>
Subject: Re: AM Phone on 20 meters

Jack, there have not been many AMers active on 14286 the past few years, BUT we can change all that!!!

I have a newly acquired Viking Ranger here that will do dandy on 20m AM when I get it percolating!

Will keep you and the group advised here.

How about it guys? Let's here some of those magnificent AM signals on 14286 again!!!!

On 5 Jun 97 at 16:41, Jack Meadows spoke about AM Phone on 20 meters and said:

> Hi gang!
>
> Is anyone active on 20 meters AM phone?
> I have a Knight T-150 to get me started again in good soundin
> amplitude modulation style! I've been monitoring 14.286 but haven't
> heard any am'rs. Any sugguestions?
>
> Thanks!
> Jack W7QQQ
> 7050 kHz BA'er and Glowbugger
>
>
>

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**************************************************
*** 73 from Radio AF4K/G3XLQ Gaithersburg, MD USA  *
**  E-mail to:  bry@mnsinc.com                    *
*** See the interesting ham radio resources at:    *
**  http://www.mnsinc.com/bry/                    *
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Date: Sun, 8 Jun 1997 12:48:55 +0000
From: "Brian Carling, Radio AF4K" <bry@mnsinc.com>
Subject: Re: Plate xfmrs

On 3 Jun 97 at 14:44, Dan Kerl spoke about Re: FW: Plate xfmrs (Was: Electroly and said:

>
> > BTW: you cannot easily disassemble most uWave xfmrs. The
> > laminations are typically welded together. That precludes
> > rewinding these jobbies.
> >
> > Vy 73, Alex, AI2Q in Kennebunk, Maine   .-.-.
>
> Does anyone know why microwave power transformer laminations are
> welded together (usually with a bead on a corner)? Is is to reduce
> lamination rattling noise? Welding the laminations together in this
> fashion will increase eddy current losses in the core.
>
> I suspect that the weld bead isn't too deep and that it would be
> possible to simply file or grind it off. It would probably help to
> re-anneal the laminations after doing this. It takes a pretty hot
> oven (802 deg C for 4 hours, as suggested by the rubber bible).

Rubber Bible? Dan, will that cause all e-mails sent to God to immediately BOUNCE back to you???
:-)

Bry, AF4K

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*   See the hilarious JOKES section at:         *
*   http://www.mnsinc.com/bry/jokes.htm         *
*   E-mail:  bry@mnsinc.com                     *
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Date: Sun, 8 Jun 1997 11:27:15 -0600 (MDT)
From: James P Rybak <jrybak@mesa7.mesa.colorado.edu>
Subject: Old Radio and Electricity Books for Sale

I am interested in the history of electricity, wireless, etc. I collect old books on various topics related to electricity and wireless. The following are some duplicate books I have in my collection. I want to sell them to make room for some additional books. All the books have good, tight bindings. Some of the books are ex-library and some of the covers may have scuff marks but all books are sound specimens with tight bindings and are in great shape considering their ages. The condition of the books listed below is my best "good faith" attempt to describe how they are. However, please remember that I am an amateur collector and am not a book dealer.

Those of you who are familiar with the prices of old books will realize immediately that I have priced these at considerably below today's "going" prices. Consequently, the prices are not negotiable. Shipping is extra and is $3 for the first book and $1.50 for each additional book. I will pay the shipping on orders of 5 or more books.

RADIO TELEPHONY FOR AMATEURS, 2nd ed., by Stuart Ballantine, 1923, VG cond. $25.

VACUUM TUBES IN WIRELESS COMMUNICATION, by Elmer E. Bucher, 1918, VG cond. $25.

PRACTICAL WIRELESS TELEGRAPHY, by Elmer E. Bucher, 1917, VG cond. $25.

THE WIRELESS EXPERIMENTER'S MANUAL, by Elmer E. Bucher, 1920, VG cond. $25.

CONQUEOR OF SPACE - THE LIFE OF LEE DE FOREST, by Georgette Carneal, 1930, G cond. $20.

MATHEMATICS FOR ELECTRICIANS AND RADIOMEN, by Nelson M. Cooke, 1942, VG++ cond. $20.

ALLESANDRO VOLTA AND THE ELECTRIC BATTERY, by Bern Dibner, 1964, fine cond. $20.

RADIO THEORY SIMPLIFIED, by Merle Duston, 1924, G+ cond. $15

WIRELESS TELEGRAPHY AND TELEPHONY, by W.H. Eccles, 1918, G++ cond., $45.

FRANKLIN - THE APOSTLE OF MODERN TIMES, by Bernard Fay, 1929,
VG cond., $15.

PROPAGATION OF ELECTRIC CURRENTS IN TELEPHONE AND TELEGRAPH CONDUCTORS,
3rd. ed., by John A. Fleming, 1919, VG cond. $55.

AN ELEMENTARY MANUAL OF RADIO TELEGRAPHY AND RADIOTELEPHONY, 3rd ed.,
by John A. Fleming, 1919, G++ cond., $50.

THE ALTERNATE CURRENT TRANSFORMER - VOL. I, by John A. Fleming, 1890,
VG cond. $50.

PRINCIPLES OF RADIO COMMUNICATION, 2nd ed, by John H. Moorecroft,
VG cond., $20.

MICHAEL FARADAY, by J.H. Gladstone, 1872, FINE cond, $

RADIO FOR EVERYBODY, by Austin C. Lescarboura, 1922 (pub. by Scientific
American), VG cond., $20.

EMPIRE OF THE AIR - THE MEN WHO MADE RADIO, by Tom Lewis, 1991,
Like New, $15.

ALEXANDER GRAHAM BELL - THE MAN WHO CONTRACTED SPACE, by Catherine
Mackenzie, 1928, VG cond., $30.

MODERN RADIO SERVICING, by Alfred A. Ghirardi, 1935, VG cond., $25.

INVENTION AND INNOVATION IN THE RADIO INDUSTRY, by W. Rupert Maclaurin,
1949, VG++ cond., $45.

THE MARCONI BOOK OF WIRELESS, by the Marconiphone Co., 1936,
VG cond., $45

THE INVENTIONS, RESEARCHES, AND WRITINGS OF NIKOLA TESLA, by Thomas C.
Martin, 1977 reprint of 1894 edition, F++ cond. $20.

A HISTORY OF ELECTRICITY AND MAGNETISM, by Herbert W. Meyer, 1972,
like new cond., $20.

THEORY OF THERMIONIC VACUUM TUBE CIRCUITS, by Leo J. Peters, 1927, VG cond., $25.

FROM IMMIGRANT TO INVENTOR, by Michael Pupin, 1925, VG+ cond. $20.

ELECTRON-TUBE CIRCUITS, by Samuel Seely, 1950, VG cond., $20.

RADIO ENGINEERING, 2nd ed., by F.E. Terman, 1937, VG cond. $25.

RADIO ENGINEER'S HANDBOOK, by F.E. Terman, 1943, extensive notes on the fly leaf and title page - otherwise VG cond., $20.

LECTURES ON THE ELECTROMAGNET, by Sylvnus P. Thompson, 1891, VG cond., $50.

LIGHT AND ELECTRICITY, by John Tyndall, 1871, VG cond., $65.

ELECTRICITY IN DAILY LIFE, chapters by noted authorities of the day, 1890, VG cond., $65.

Date: Sun, 8 Jun 1997 13:37:26 -0500 (CDT)
From: Kevin Pease <hamradio@mm1001.theporch.com>
Subject: Globug rigs etc:

A while back I posted about a regen project that I was working on. I was undecided about superhet vs regen. Well creaping featurism entered the picture and I ended up with a full blown dual conversion superhet with an RF amplifier and a cw bandwidth collins mechanical filter. it uses an old VFO mechanism salvaged out of an old Drake RV-3 parts chasis.

Well I am now pleased with the results. It uses audio derived AGC and works well to a speaker. It has 1 KC readout courtesy of the DRAKE stuff and is quite sensitive and stable. I guess I have trouble giveing up the moder High Performance stuff. The RX covers 80 and 40 meters.

The activety on 80 meters has been slim lateley. Fourty Meters has been pretty good.

Next is a 6BM8 transmitter in the same box. I may also secum to the temptation of semi-breakin operation. I havn't decided yet but you know how those things happen.

The TX should bee good for 10 watts when I get it going with maybee 6 or seven watts output. That should be pretty good semi QRP level for some glowbug contacts. It will be XTAL controlled so I need to order some Xtals. I also like to just listen with it.

Maybee after I get it working to my satisfaction I can make an external VFO for the rig and have a deluxe Glow bug station.

It has been lots of fun to buld this RIG and brings back memorys of my youth whan I built lots of those things. I have even gotten bit a few times by the 300 volts from the power supply and had a few choice words about that.

I hope to have the rig on the AIR soon to join the glowbug fun.

Kevin Pease
WB0JZG
Mount Juliet, TN.

Date: Sun, 8 Jun 1997 13:41:29 -0500 (CDT)
From: Kevin Pease <hamradio@mm1001.theporch.com>
Subject: Re: AM Phone on 20 meters

On Sun, 8 Jun 1997, Brian Carling, Radio AF4K wrote:

> Jack, there have not been many AMers active on 14286 the past few
> years, BUT we can change all that!!!
>
> I have a newly acquired Viking Ranger here that will
> do dandy on 20m AM when I get it percolating!
>
> Will keep you and the group advised here.
>
> How about it guys? Let's here some of those magnificent AM signals on
> 14286 again!!!!
>
That sounds like lots of fun. I have a RANGER and L4 that would work well there. I bet lots of power will be needed to survive the crazy's on that band. I can just here the complaints and jaming already and havent tried it yet.

Kevin Pease
WB0JZG/4 Mount Juliet TN.

Date: Sun, 08 Jun 97 16:54:58 PDT
From: "Adam McLaughlin KD6POC" <kd6poc@jps.net>
Subject: 6AG5s still needed

Dear fellow Glowbuggers,

Does anybody still have the address for the guy selling the 6AG5s? I need=
 a few for a radio that uses them. I would really like to get a hold of =
the seller to obtain a few of these tubes.

Thanks in Advance!

P.S. Hey Matt, I got your message OK. I just haven't replied to it yet. =
. .

Adam McLaughlin KD6POC

QRG: 7037 KHz
kd6poc@jps.net
http://www.jps.net/jmclaugh

Date: Sun, 08 Jun 1997 21:23:09 -0700
From: "D.D. Todd" <dube3@n-link.com>
Subject: Re: 12AX7...

Ken Gordon wrote:
>
> On Sat, 31 May 1997 provero@connix.com wrote:
>
> > Each section is rated for 1 watt max plate dissipation....
> >
> A mis-print which should read either .75 watt or 1.5 watt rather than 7.5
> watts, and what about the 300 VDC at 40ma. on the plates? Two errors?
> Not likely. MOre likely a misunderstanding of what the tube tables are
> actually talking about.

According to my GE tube manual there are no power output ratings. There is,
however, a maximum plate dissipation rating, which is given as 1.2 watts
(DESIGN MAX) per section. Elsewhere, it gives 1.2 mA at 250 V, or 0.5 mA
at 100 V for Class-A operation.
- --
D.D.Todd   K4DWW   dube3@n-link.com

Can there be greater blindness than to impute the crime to the dagger
and not to the hand that wields it?

-- Antonio Lopez de Santa Anna

Date: Mon, 09 Jun 1997 23:15:56 GMT
From: wrt@eskimo.com (Bill Turner)
Subject: Re: 6AG5s still needed

On Sun, 08 Jun 97 16:54:58 PDT, "Adam McLaughlin KD6POC"
<kd6poc@jps.net> wrote:

>Dear fellow Glowbuggers,
>
>Does anybody still have the address for the guy selling the 6AG5s? I =
need a few for a radio that uses them. I would really like to get a hold =
of the seller to obtain a few of these tubes.
>
>Thanks in Advance!
>
<><><><><><><><><><><><><><><><><><><><><><><><><><><><>
I think this is the guy you want:

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin=20
miniature made by Philips in the USA 1986, NOS, individual=20
boxes, 8000 available, shipping in the USA: 1 - 199 $3.00,=20

200 or more shipping free!
$0.10 each

=46or more ELECTRON TUBES (both new and/or used), various=20
ANTIQUE RADIOCOMPONENTS or ELECTRONIC TEST EQUIPMENT,=20
please E-mail:
                        sales@emodus.com
=46or a complete list.
Thank you! =20

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73, Bill W7TI

End of glowbugs V1 #54
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Created by **Steve Modena, AB4EL**
Comments and suggestions to **modena@SunSITE.unc.edu**
